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# Utilization of Health Services by Mexican Immigrant Women in San Diego

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**ABSTRACT.** The limited empirical data available on maternal health problems among Mexican immigrant women in the United States suggest that they underutilize health services, especially general preventive care. Research conducted among legal and undocumented women in the Mexican immigrant population in San Diego, California, support these findings. Among undocumented mothers, 11.5% of their births in the U.S. occurred with no prenatal care or care sought in the third trimester, which is much higher than Mexican women legally in the country (3.6%) and the general San Diego maternal population (3.8%). When we examine births which occurred within the last five years by immigration status, we find that women legally in the country have a much higher rate of cesarean delivery of both undocumented women and women in the general San Diego maternal population. Undocumented women in our sample were much less likely than their legal counterparts (a) to return for postpartum examinations for themselves, (b) to seek neonatal care for their infants, and (c) to have had Pap examinations or carry out breast self-examinations.

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## INTRODUCTION

Medical care for Mexican immigrant women is a topic of concern for both researchers and policy-makers. Although empirical data are limited, the literature indicates that Mexican-born women in the U.S. underutilize health care facilities and are less likely to receive prenatal and general preventive care (Colon, 1984; Feldman et al., 1983; Mines and Kearney, 1982; Roberts and Lee, 1980; Marin et al., 1980; Mexican-American Policy Research Project, 1979; Velimirovic, 1979; Teller, 1978; Weaver, 1973; Moustafa and Weiss, 1968). For example, a study of birth records for all mothers in Alameda and Santa Clara Counties in California during 1976 and 1977 indicated that prenatal care for Hispanic mothers is characterized by late onset or complete absence of care compared to mothers in other ethnic and racial groups (Medina, 1980, 1979). Despite underutilization, maternal and child health services have been cited as the most important health care needs of the settled Mexican immigrant population, in contrast to the recent, temporary migrant from Mexico who has health problems similar to those found in his or her place of origin (Cornelius et al., 1982; Jones, 1981; Orange County Task Force on Medical Care for Illegal Aliens, 1978).

The purpose of this paper is to examine data collected on medical care experiences among Mexican women in San Diego, California. We argue that health care for this population must be viewed within the growing body of literature which relates the distribution of health resources in America to social class and race (Aday and Fleming, 1984, 1980; Davis and Rowland, 1983; Bullough and Bullough, 1982; Rudov and Santangelo, 1979; Wan and Gray, 1978). The difficulty of securing access to health care led a recent presidential commission to ask whether "some individuals are systematically receiving 'second class' care of inadequate quality" (President's Commission, 1983:75). Moreover, the mounting evidence that factors related to social class (e.g., income, education, medical insurance coverage, geographic location) influence the quality of care a patient can expect has given rise to the argument that there exists a "political economy of health care" in America (Chavez, 1986; Starr, 1982; Waitzkin, 1983).

Recent research indicates that factors related to class also affect the delivery of maternal and child health care (Garn, Shaw and McCabe, 1977; Brooks, 1975; Kessner, 1973). Although many Mexican immigrant women may share the problems in obtaining health

care faced by low-income women generally, immigration status introduces another factor. Many of these women are in the country without proper documentation from the U.S. Immigration and Naturalization Service and as a result experience restrictions on access to the "social safety net" provided by government-sponsored health programs (e.g., Medicaid).

Consequently, we pay particular attention to immigration status in the analysis of the use of prenatal, postnatal and other preventive services. We examine differences in utilization patterns between legal and undocumented Mexican immigrant women and compare these patterns with the general maternal population in San Diego, or the United States, whenever possible. The general question is, do Mexican women exhibit a pattern of health care usage which indicates they are underutilizing health services?

Within the area of health care for women, increased attention is being paid to the factors related to cesarean delivery. According to Hurst and Summey (1984:621), "middle and upper class women are at higher risk for cesareans than lower class women; the socioeconomic group of women with the lowest risk of pregnancy complications thus runs the highest risk of medical intervention during labor and delivery." Consequently, we also explore for variation in the rate of cesarean deliveries among Mexican women in our sample. Following Hurst and Summey, we hypothesize that legally-immigrated women will have higher rates of cesarean delivery.

## **METHODS**

The fieldwork upon which this paper is based was conducted between March 1981 and February 1982 (see Cornelius et al., 1984). During this period, we conducted personal in-home interviews with 2,103 adults (aged 17 or more) born in Mexico who were living or working in San Diego County at the time, regardless of their legal status in the United States. Women constituted 48.9% (1,028) of the informants. Interviews were conducted in 47 localities dispersed throughout the County (including rural as well as urban areas).

An important characteristic of the Mexican immigrant population is the large, but difficult to determine, number of individuals in the U.S. without proper documentation from the Immigration and Naturalization Service. Data on undocumented immigrants are

difficult to come by for a number of reasons. Health care providers rarely keep records which distinguish legal from undocumented patients. Where providers do attempt to determine a patient's immigration status, they often base such determinations upon subjective indicators, such as clothing or language use, which raises serious methodological questions concerning the reliability and use of any data collected. Although difficult to collect, information on intraethnic diversity related to immigration status is crucial to understanding behavior patterns related to the use of health services (Keefe, 1982; Dallek, 1980).

Interviewing a "representative" sample of the Mexican immigrant population—in San Diego County or elsewhere in the United States—presents special difficulties because of the large proportion of undocumented migrants in this population. To date, the most successful approach for overcoming these identification and access problems among undocumented immigrants within the United States has been the "snowball" sampling procedure, in which each successive interview is with a relative or friend of the previous interviewee, who provides the interviewer with the necessary introductions and assistance in making contact with other members of his kinship/friendship network (Cornelius, 1981). The initial interviewees thus help the researcher to establish his/her credibility and rapport with later waves of respondents.

The procedure of "snowball" sampling within kinship/friendship networks tends to bias the resulting sample of Mexican migrants toward permanent settlers or at least "long-stayers" in the United States. These more-or-less permanent settlers constitute the portion of the Mexican immigrant population that is most likely to make use of health services in the United States—especially services of a non-emergency character. In the present study we sought to reduce this inherent bias toward permanent settlers by seeking some of our initial contacts among certain occupational groups noted for high seasonality (e.g., farmworkers and certain classes of workers in the hotel and tourist industry), by dispersing our initial contact points over as wide a geographic area as possible, and by broadening the sources of initial contacts to include many different types of community-based organizations with diverse clientele.

Our interviews with Mexican immigrants averaged more than two hours in duration. They were conducted by a highly skilled, well-trained staff of bilingual, full-time and student interviewers operating out of the Center for U.S.-Mexican Studies at the

University of California, San Diego. Both the household head and spouse (if living in San Diego) were interviewed whenever possible.

The interview schedule consisted of both closed questions (in which the responses are anticipated) and open-ended questions. The latter questions allowed for in-depth probing and follow-up questioning. Responses to the open-ended questions were recorded exactly as stated by the interviewee and were later classified into response categories, a method which allowed for the gathering of extensive qualitative data.

The interview schedule was designed to gather a wide range of information concerning the interviewee's social, as well as health, history. Questions in the first section dealt with the interviewee's marital status, educational attainment, proficiency and literacy in English, household composition, migration history and work experience in the United States. The second section dealt with the interviewee's most recent experience with a health care provider, attitudes towards traditional healers, preventive health care practices, perinatal care and child health histories.

In order to establish immigration status, a series of questions and follow-up questions were asked of each respondent. Most of the undocumented respondents readily admitted that they entered the country without having first obtained proper documentation from the U.S. Immigration and Naturalization Service. Others claimed to have "papers," but upon further questioning the papers proved to be fake or did not allow the respondent to live and work in the U.S. (e.g., a "border crossing card" which allows shopping and visiting).

## **RESULTS**

As Table 1 indicates, we interviewed slightly more women who had immigrated legally (52.2%) than those who migrated without proper documentation from the U.S. Immigration and Naturalization Service (47.8%). Women in our sample tend to be younger than women in the general San Diego population. The 1980 Census places 19.7% of the women in San Diego County in the 20 to 29 age category, compared to 35.1% of the women in our sample.

The length of time respondents have resided in the U.S. varies by

TABLE 1  
 CHARACTERISTICS OF MEXICAN IMMIGRANTS,  
 SAN DIEGO COUNTY SAMPLE,  
 BY IMMIGRATION STATUS AND SEX  
 (Total N = 2,103)

CHARACTERISTICS (medians or percentages)	UNDOCUMENTED		LEGAL IMMIGRANTS	
	Men (N=588)	Women (N=491)	Men (N=487)	Women (N=537)
Years in the U.S.	3	4	16	13
Age at Interview	26.8	27.3	40.3	38.6
Years of Education	5.6	5.6	5.6	5.8
% Illiterate	11.4	14.5	4.4	6.5
% Cannot Speak English	49.6	60.0	32.9	40.3
% Cannot Read English	68.0	68.8	40.8	43.9
% Currently Employed	92.9	63.5	90.0	47.5
Annual Job Income	\$7,334.0	\$6,243.0	\$9,099.0	\$7,026.0
Household Size		4.1		3.9

immigration status. Undocumented interviewees can be characterized as relatively recent arrivals. Legal immigrants in our sample tend to be relatively long-term residents. Undocumented and legally-immigrated women have about the same level of educational attainment. However, fewer undocumented women were proficient in English.

The proportion of women who worked outside the home and their earning also varied by immigration status. Sixty-three percent of the undocumented women worked compared to 47.5% of their legally-immigrated counterparts. The median income of undocumented women is lower than that of the legally-immigrated women, primarily due to undocumented women being clustered in service sector jobs, especially domestic work. In addition to generally receiving low incomes, many women (57.8%) in our sample lacked private medical insurance. Women who legally immigrated were much more likely to have medical insurance than their undocumented counterparts.

We asked a series of questions concerning prenatal and postnatal care in relation to the informant's most recent pregnancy. We found



that out of 736 women with a history of previous pregnancies, 16.4% had received no prenatal care during their last pregnancy (including pregnancy occurring either before or after migration to the U.S.). This is a very large proportion, when compared with the general U.S. population. In the late 1970s, only 1.5% of births in the U.S. generally were to mothers who had no prenatal care (as reported in U.S. Vital and Health Statistics, Series 21, No. 30, 1978).

As shown in Table 2, lack of care was more common among undocumented migrant women, 20.1% of whom did not receive prenatal care during their last pregnancy, as compared with about 13.8% of the legal immigrant women in our sample. However, many of these births occurred in Mexico before the informant migrated to the United States.

When we examined the patterns of care exhibited only by women who delivered in the U.S. (rather than in Mexico) within the last five years (Table 3), we found that undocumented mothers were more likely than women who legally immigrated not to have received prenatal care. Moreover, undocumented women tended to wait until late in their pregnancies to seek prenatal care: 6.8% sought prenatal care in their last trimester compared to 1.9% of the legally-immigrated women who did so (proportions are of the women who received prenatal care).

The percentage of mothers in our sample who recently delivered in San Diego with "inadequate" prenatal care, defined by the Center for Health Statistics of the California Department of Health Services as no care or care which began in the third trimester, is 3.6% of the legally-immigrated mothers and 11.5% of the undocumented mothers. According to the Center for Health Statistics, only 3.8% of the women in the general maternal population in San Diego County received inadequate prenatal care (Center for Health Statistics, 1982:166), well below the rate exhibited by undocumented mothers in our sample.

Hospitals provided most of the prenatal care received by the women we interviewed, accounting for 29.3% of the care provided. However, women also utilized U.S. private physicians (16.2%) and community clinics (12.5%). One-quarter (25.6%) of the women had sought prenatal care for their last pregnancy in Mexico (including the nearby border city of Tijuana) rather than from a U.S.-based provider. The UCSD Medical Center (San Diego's "county hospital") was the single most important facility providing prenatal care

TABLE 2  
 PRENATAL CARE\*, TYPE OF DELIVERY\*\* AND PAP EXAM\*\*\*  
 AMONG FEMALE MEXICAN IMMIGRANTS

	Undocumented		Documented		Total	
	N	%	N	%	N	%
No Prenatal Care	62	20.1%	59	13.8%	121	16.4%
Had Prenatal Care	247	79.9	368	86.2	615	83.6
Totals	309	42%	427	58%	736	100.0%

Significance (Chi-square) = .03.

	Undocumented		Documented		Total	
	N	%	N	%	N	%
Natural Birth	114	82.6%	63	66.3%	177	76.0%
Cesarean Birth	24	17.4	34	33.7	56	24.0
Totals	138	100.0%	95	100.0%	233	100.0%

Significance (Chi-square) = .01 or less.

	Undocumented		Documented		Total	
	N	%	N	%	N	%
No Pap Exam	150	35.7%	77	15.6%	227	24.9%
Had Pap Exam	270	64.3	416	84.4	686	75.1
Totals	420	46.0%	493	54.0%	913	100.0%

Significance (Chi-square) = .01 or less.

\*Not restricted to last pregnancy in the United States.

\*\*Restricted to women who have birth in the U.S. within five years of interview.

\*\*\*Includes all women in sample; not restricted to maternal subsample.

to the women in our sample (accounting for more than 10% of the care received).

Women in our sample appear to have a slightly elevated rate of birth by cesarean section. Twenty-four percent of the recent (within the five years of the interview) births at U.S. hospitals reported by

TABLE 3  
 TRIMESTER OF FIRST PRENATAL EXAM FOR LAST BIRTH IN  
 U.S. HOSPITAL WITHIN THE LAST FIVE YEARS  
 BY IMMIGRATION STATUS

	Undocumented		Documented		Total	
	<u>n</u>	%	<u>N</u>	%	<u>N</u>	%
Never examined	7	5.0%	2	1.8%	9	3.6%
First trimester	75	54.0	94	86.2	169	68.2
Second trimester	48	34.5	11	10.1	59	23.8
Third trimester	9	6.5	2	1.8	11	4.4
Total	139	100.0	109	99.9	248	100.0

Significance (Chi-square) = .001 or less.

our interviewees occurred by C-section. In comparison, 17.2% of the total births in San Diego in 1981 occurred through the cesarean procedure (Center for Health Statistics, 1982:166).

Table 2 indicates that there is a significant difference in the frequency of C-section deliveries between undocumented women and legally-immigrated women in our sample. Legal immigrant women who recently delivered their last babies in U.S. hospitals exhibited a much higher rate of C-section delivery than their undocumented counterparts, 33.7% compared to 17.4%. The proportion of C-section deliveries for undocumented women in the sample is about the same proportion as that of women who delivered their last baby by C-section in Mexico (16.2%).

Table 4 presents the cesarean data according to selected age categories. Women thirty to forty-five years of age experience greater risk, that is, they experience a higher rate of conditions likely to lead to rational use of C-section as distinguished from the statistical probability of having a C-section. There is no statistically significant difference between undocumented and legally-immigrated women in this relatively older age category. For younger women (between 16 and 24), however, a difference is observable, although the significance level is not decisive. If we increase the number of cases by examining women between 16 and 29 years of age, the significance

TABLE 4  
TYPE OF DELIVERY FOR MOTHERS WHO GAVE BIRTH  
IN THE UNITED STATES WITHIN THE LAST FIVE YEARS,  
BY SELECTED AGE CATEGORIES

	UNDOCUMENTED		DOCUMENTED		TOTALS	
	N	%	N	%	N	%
<b>Ages 16-24</b>						
Natural	41	87.2%	10	62.5%	51	81.0%
Cesarean	6	12.8	6	37.5	12	19.0
Totals	47	100.0	16	100.0	63	100.0
Significance (Chi-square)= 0.07.						
<b>Ages 25-29</b>						
Natural	43	86.0	23	71.9	66	80.5
Cesarean	7	14.0	9	28.1	16	19.5
Totals	50	100.0	32	100.0	82	100.0
Significance (Chi-square)= 0.19. Not Significant.						
<b>Ages 30-45</b>						
Natural	30	73.2	30	63.8	60	68.2
Cesarean	11	26.8	17	36.2	28	31.8
Totals	41	100.0	47	100.0	88	100.0
Significance (Chi-square)= 0.47. Not significant.						
<b>Ages 16-29</b>						
Natural	84	86.6	33	68.8	117	80.7
Cesarean	13	13.4	15	31.2	28	19.3
Totals	97	100.0	48	100.0	145	100.0
Significance (Chi-square)= .05 or less.						

is greater than a 0.05, indicating a difference does exist in this relatively young age group.

Many mothers in our sample who delivered their last child in the U.S. within the last five years before the time of the interview decided not to seek post-delivery examinations for their infants and themselves. Of the infants delivered at a U.S. hospital or clinic,

5.1% did not receive a neonatal infant examination. However, the immigration status of the mother makes a significant difference. The percentage of the undocumented mothers (10.1%) that did not take their newborn infants in for a neonatal examination is significantly different from the percentage of legal mothers (1.9%) whose children did not receive such an examination (significance based upon Chi-square calculations = .001 or less). By way of explanation, most mothers (48.8%) believed their infants were healthy and therefore a neonatal checkup was unwarranted. Another 12.8% believed a neonatal infant checkup was too expensive.

An even higher proportion (9.9%) of the mothers themselves did not seek a postpartum checkup after their last delivery at a U.S. hospital or clinic. The seeking of postpartum checkups also varies by the immigration status of the respondent. Among the undocumented women interviewed, 16.8% did not return for a postpartum checkup compared to only 5.3% of the legally-immigrated women who failed to return for such a checkup (significance based upon Chi-square calculations = .001 or less). Most women (53.2%) believed they were healthy and therefore did not need a postpartum examination. However, another 8.7% of the women believed return visits were too costly.

Nearly one-quarter of the women of childbearing age in our total sample of women (not restricted to maternal subsample) have never had a Pap smear test for cancer, a highly effective method for detecting cervical cancer (Jones and Jones, 1981:317). Table 5 compares the rates for Pap exam exhibited by Mexican women in our sample to white and black women in the general U.S. population. Women in our sample were less likely to have had a Pap exam than white women, but Black women over 45 years of age (particularly poor, rural Southerners) exhibited the highest rates for women who have never had a Pap exam (Kleinman and Kopstein, 1981:74). However, when the immigration status of our respondents is taken into account (Table 2), the proportion of undocumented women who have never had a Pap exam reaches 36.7%, exceeding that of black women.

We also examined other areas of prevention relating to women's health. Many women in our sample, 44.2%, did not know how to administer a self-examination for breast cancer. Comparing their relative lack of knowledge concerning the breast self-examination process, undocumented women were about twice as likely not to know the procedure than women legally in the country. Even more

TABLE 5  
 MEXICAN, U.S. WHITE, AND U.S. BLACK\* WOMEN  
 WHO HAVE NEVER HAD A PAP EXAM,  
 BY AGE CATEGORIES  
 (in percentages)

Years of Age	Mexican Women San Diego sample	U.S. White Women	U.S. Black Women
17-44** (N=731)	25.2%	7.0%	12.3%
45-64 (N=205)	22.9	16.6	30.2

Significance (Chi-square) = N.S.

\*Source for U.S. data: Kleinman and Kopstein 1981: 74.  
 Their figures are based on a 1973 National Health Interview Survey.

\*\*This age category is 25-44 for the U.S. data.

worrisome is that at least 35% of the women who believed they had breast tumors (N=34) had not sought a medical examination for that problem.

### DISCUSSION AND QUALITATIVE OBSERVATIONS

Both documented and undocumented respondents exhibited a number of socioeconomic characteristics which could influence their utilization of U.S. medical services. They earned low incomes, had little education, many had trouble with English, and, in the case of the undocumented women, many had resided in the U.S. for a brief time. In addition, they displayed a pattern of medical insurance coverage distinctly below that of the general U.S. population. The Survey of Income and Education estimated that in 1980, 70% of the American population were insured under private health insurance plans, most obtained through the workplace (President's Commission, 1983:95).

The data indicates that underutilization of prenatal care exists in this population. It is important that prenatal care be timely, initiated in the critical first trimester, in order to diagnose problems at the earliest possible time (Pritchard and Macdonald, 1980:304). However, compared to women in the general San Diego maternal

population and legally-immigrated Mexican women, undocumented mothers in our sample were three times more likely to deliver without prenatal care or with prenatal care sought late in the pregnancy.

It is unlikely that this difference in prenatal care reflects behavior based upon custom or cultural beliefs, since legal and undocumented women share the same cultural background. It may reflect, however, differences in knowledge about the availability of services (President's Commission, 1983). Factors associated with their undocumented immigration status, such as low income, lack of medical insurance and fear of detection, must also be considered as factors which inhibit the seeking of prenatal care.

In some cases, the first contact informants had with the U.S. health care system occurred in the hospital emergency room during labor. In such cases, the attending physicians are unfamiliar with the woman's prenatal history and are often unable to anticipate birth complications. Delivery in this fashion increases the health risks to both the infant and the mother.

Variation in rates of cesarean section we found among the women we interviewed are difficult to interpret because of the lack of a generally agreed upon "appropriate" rate of births by cesarean. For many years the percentage of births which occurred through cesarean delivery was stable at approximately 3% or 4% of all births, with a top limit of 5% considered appropriate for an obstetric practice (Burchell, 1981). The last 10 to 15 year period has witnessed a dramatic increase in the overall rates of cesarean delivery. In 1978, a wide range of rates were found throughout the country, from 10.1% at the University of Iowa Hospital to a high of 22% at the Boston Hospital for Women. The 16.8% rate at the University Hospital of the UCSD Medical Center in San Diego in 1978 was about average at that time (Pritchard and Macdonald, 1980). In 1980, the nationwide average had risen to about one-sixth of all births occurring by cesarean section (Placek, Taffel and Keppel, 1972).

To a certain extent, the slightly elevated rate of C-section deliveries among the women in our sample reflects the trend toward a greater frequency of C-section deliveries in the general population. However, even the existence of such a trend does not explain the difference in rates of cesarean delivery that we found for legal compared to undocumented women, especially in the relatively young age groups. Women in both groups share certain character-

istics. Working Mexican immigrant women in general (and the undocumented in particular) tend to be found in physically demanding, low paying jobs. If qualitative responses can serve as a guide, Mexican immigrants in general view operations, including cesarean procedures, negatively and with fear. Natural, or vaginal, deliveries are thus the preferred style of delivery for both legal and undocumented mothers. And yet, Mexican women legally in the U.S. deliver by C-section to a degree significantly greater than both undocumented Mexican women and women in the U.S. population.

We hypothesize that an explanation for the elevated rate of C-section delivery among legal immigrant women in our sample must be sought in the system of health care delivery, in which a key factor for delivery of elective surgery is the ability to pay. A major distinguishing characteristic between the groups within this population is that legal immigrant women have a greater ability to pay for health care than undocumented women. As legal residents, these women have access to social programs which assist in meeting the cost of delivery, including cesarean delivery. Legal women are also more likely than undocumented women to have private medical insurance. In addition to an increased ability to pay, the convenience provided by C-section delivery is another factor which must be considered. For mothers, as well as for doctors, the C-section procedure allows the scheduling of delivery at an appropriate time. Moreover, many of the C-sections reported here occurred at a teaching hospital that is also the de facto "County Hospital," which may influence the high rate of C-section deliveries among legally-immigrated Mexican women.

The patterns presented here are provocative and support Hurst and Summey's (1984) contention that cesarean rates are affected by factors related to class, or in this case, access to government-sponsored health programs and private medical insurance which assist in paying for the operation. However, these data do not lead to the drawing of definitive conclusions on the variation in rates of cesarean between Mexican immigrant women and U.S. citizens, or even variation among various groups of U.S. citizens. Further research is needed on the factors related to cesarean delivery among Mexican immigrant women in particular and women in general.

It is worth noting that the high rate of cesarean deliveries we encountered affects this population in ways which are difficult to quantify but which, if presented here, could lead to further research. For example, qualitative data collected from the women in our



sample suggest that hospital policies which fail to consider cultural attitudes toward operations and cesarean deliveries held by Mexican immigrants help create a context for misunderstanding. Many Mexican women we interviewed were bewildered by having been told by U.S. doctors that a cesarean delivery was necessary, particularly women who had given one or more births vaginally in Mexico. In addition to bewilderment, some of our interviewees also expressed fear of U.S. doctors, and characterized specific hospitals, such as large teaching hospitals, as particularly likely to prescribe C-section deliveries. As one woman commented:

I had planned to deliver my baby in University Hospital (at the UCSD Medical Center). But my friend had her baby six weeks before I was due. She had an unexpected cesarean and it cost her \$4,000. For this reason I was afraid to go to the hospital. I delivered at home with a *partera* (midwife).

This is an example of the behavior where, rather than risk a delivery by cesarean section, some women in our sample turned to an underground network of uncertified, Spanish-speaking midwives operating among the Mexican women in our sample. Home deliveries with the aid of midwives offer an alternative to hospital delivery. Women viewed such deliveries favorably because delivery is natural, or vaginal, and the midwives offer prenatal and postnatal care at a total cost of between \$300 and \$600.

In essence, qualitative data suggest individuals, as a result of interactions with hospital staff, form negative attitudes which affect future health-care seeking behavior. Mexican patients in particular have certain beliefs and fears about operations which medical practitioners should be cognizant of and attempt to understand. Minimally, doctors and hospital/clinic staff should make an effort to explain clearly and in detail the reasons for an emergency cesarean delivery.

As for the reluctance to seek postpartum and neonatal care, immigration status appears to be a significant explanatory variable. It is quite likely that undocumented mothers neglect return doctor visits for themselves and their infants to avoid bringing attention to their presence in the country. The cost of care given their resources is another disincentive for seeking checkups which may be viewed as unnecessary.

The large proportions of women who did not seek preventive

gynecological care and who did not know techniques for breast self-examination may be related to the demographic differences between legal and undocumented women. Undocumented women tended to be younger and with less time in the U.S. compared to their legal counterparts, which may help explain the patterns which emerged. Added to such an explanation are the other factors associated with immigration status: fear of detection and lack of medical insurance.

### CONCLUSION

This analysis suggests that a significant proportion of the Mexican immigrant women in our sample underutilize preventive health services. Moreover, undocumented women were more likely to underuse prenatal care services, postpartum and neonatal care, and preventive gynecological care when compared to their legal counterparts.

Further research needs to be conducted on the cost of preventive care and the lack of education, especially in Spanish, concerning the importance of health problems specific to women as possible explanations for the underutilization of preventive health services that we encountered. Problems of accessibility due to hospital and clinic screening criteria may also influence this pattern of utilization, especially considering that undocumented women tend to be in the low-income category, do not qualify for most government-sponsored health programs, and rarely have medical insurance. Fear of detection must also be considered an additional factor affecting the reluctance to seek health services among this population.

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